

Rabbit ILF3 Polyclonal Antibody | anti-ILF3 antibody

ILF3 Antibody

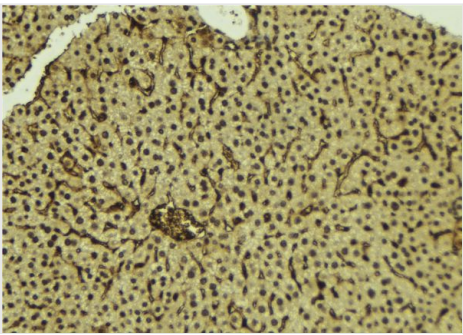
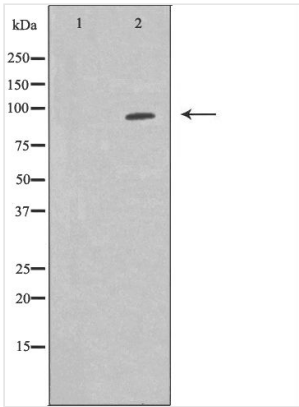
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326714	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

ILF3; Polyclonal Antibody; ILF3 Antibody; CBTF; Double stranded RNA binding protein 76; Double-stranded RNA-binding protein 76; DRBF; DRBP76; ILF3_HUMAN; Interleukin enhancer binding factor 3; Interleukin enhancer-binding factor 3; M phase phosphoprotein 4; M-phase phosphoprotein 4; MPHOSPH4; MPP4; NF AT 90; NF-AT-90; NF110; NF90; NFAR; Nuclear factor associated with dsRNA; Nuclear factor of activated T cells 90 kDa; Nuclear factor of activated T-cells 90 kDa; TCP80; Translational control protein 80; anti-ILF3 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	ILF3 antibody detects endogenous levels of total ILF3
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	706
Applicable Applications for anti-ILF3 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human ILF3
Subcellular Location	Nucleus > Nucleolus. Cytoplasm. Localized in cytoplasmic mRNP granules containing untranslated mRNAs.
Tissue Specificity	Ubiquitous.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Dog, Chicken
Similarity	Pig (100%), Bovine (100%), Horse (92%), Sheep (100%), Rabbit (92%), Dog (100%), Chicken (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)
AAA326714 at 1/100 staining Mouse liver tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

WB (Western Blot)
Western blot analysis of K562 whole cell lysates, using ILF3 Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-ILF3 antibody

Description: This gene encodes a double-stranded RNA (dsRNA) binding protein that complexes with other proteins, dsRNAs, small noncoding RNAs, and mRNAs to regulate gene expression and stabilize mRNAs. This protein was first discovered to be a subunit of the nuclear factor of activated T-cells (NFAT); a transcription factor required for T-cell expression of interleukin 2. NFAT is a heterodimer of 45 kDa and 90 kDa proteins, the larger of which is the product of this gene. These proteins have been shown to affect the redistribution of nuclear mRNA to the cytoplasm. Knockdown of NF45 or NF90 protein retards cell growth; possibly by inhibition of mRNA stabilization. In contrast, an isoform (NF110) of this gene that is predominantly restricted to the nucleus has only minor effects on cell growth when its levels are reduced. Alternative splicing results in multiple transcript variants encoding distinct isoforms.[provided by RefSeq, Nov 2008]

Function: RNA-binding protein that plays an essential role in the biogenesis of circular RNAs (circRNAs) which are produced by back-splicing circularization of pre-mRNAs. Within the nucleus, promotes circRNAs processing by stabilizing the regulatory elements residing in the flanking introns of the circularized exons. Plays thereby a role in the back-splicing of a subset of circRNAs (PubMed:28625552). As a consequence, participates in a wide range of transcriptional and post-transcriptional processes. Upon viral infection, ILF3 accumulates in the cytoplasm and participates in the innate antiviral response (PubMed:21123651). Mechanistically, ILF3 becomes phosphorylated and activated by the double-stranded RNA-activated protein kinase/PKR which releases ILF3 from cellular mature circRNAs. In turn, unbound ILF3 molecules are able to interact with and thus inhibit viral mRNAs (PubMed:21123651, PubMed:28625552).

Subunit Structure: Identified in a IGF2BP1-dependent mRNP granule complex containing untranslated mRNAs. Interacts with FUS and SMN. Interacts (via C-terminus) with PRMT1. Forms a complex with ILF2. Can also bind to PRKDC/XRCC7: this may stabilize the interaction of PRKDC/XRCC7 and the heterodimeric complex of XRCC6/KU70 and XRCC5/KU80. Forms a heteromeric complex with ZNF346 and ILF3. Found in a nuclear export complex with XPO5, ILF3, Ran and double-stranded RNA or double-stranded minihelix VA1 RNA. Found in a nuclear export complex with XPO5, RAN, ILF3, ZNF346 and double-stranded RNA. Interacts with XPO5 and ZNF346. Forms a complex with ILF2, YLPM1, KHDRBS1, RBMX, NCOA5 and PPP1CA. Interacts with AGO1 and AGO2.

Post-translational Modifications: Phosphorylated at Thr-188 and Thr-315 by PKR in response to certain RNA viruses. This phosphorylation results in the dissociation of ILF2 from the ILF2-ILF3 complex resulting in a cytoplasmic sequestration of ILF3 where it can bind to viral RNAs and impede viral replication. Methylated by protein arginine N-methyltransferase 1.

NCBI AND UNIPROT INFORMATION

NCBI GI #	212549555
NCBI GeneID	3609
NCBI Accession #	NP_001131145.1
NCBI GenBank Nucleotide #	NM_001137673.1

UniProt Accession #	Q12906 ; O43409 ; Q6P1X1 ; Q86XY7 ; Q99544 ; Q99545 ; Q9BZH4 ; Q9BZH5 ; Q9NQ95 ; Q9NQ96 ; A8K6F2 ; G5E9M5
Molecular Weight	Observed: 95 kDa Predicted: 96 kDa
NCBI Official Full Name	interleukin enhancer-binding factor 3 isoform e
NCBI Official Synonym Full Names	interleukin enhancer binding factor 3
NCBI Official Symbol	ILF3
NCBI Official Synonym Symbols	CBTF; DRBF; MMP4; MPP4; NF90; NFAR; NF110; NF90a; NF90b; NFAR2; TCP80; DRBP76; NF110b; NFAR-1; TCP110; MPHOSPH4; NF-AT-90
NCBI Protein Information	interleukin enhancer-binding factor 3
UniProt Protein Name	Interleukin enhancer-binding factor 3
UniProt Gene Name	ILF3
UniProt Synonym Gene Names	DRBF; MPHOSPH4; NF90; DRBP76; MPP4; NFAR; NF-AT-90; TCP80

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/ilf3-antibody-immunohistochemistry-western-blot-elisa/326714>